

**Abstract**

An AAL2/SSCS packet voice system multiplexes various forms of voice-band traffic including voice packets, fax packets, and data packets into a virtual circuit (VC). This AAL2/SSCS packet voice system executes a dynamic call admission algorithm that takes into account call type in deciding whether to admit a new call to the VC. In particular, this approach takes into account different bandwidth needs for different call types. The AAL2/SSCS packet voice system also performs bit or block dropping on voice packets to mitigate the effects of traffic congestion. The bit or block dropping is done based on the packet queue fill value exceeding at least one queue threshold. Further, the AAL2/SSCS packet voice system also dynamically varies a queue threshold as a function of capacity.